Session 5: Post class test solutions

1. c. Expose yourself to those risks where you get a high enough return to compensate you for the risk. If you take no risk, there will be no business and no investments. If you take all risks, you are being foolhardy. You would like to take only those risks that have good payoffs, but if this was guaranteed, there would be no risk in the first place.

2. If you wanted to minimize risk you would take investment A (zero risk). If you want to maximize returns, you would go with investment B, since it has the highest expected return. You would never take investment D, since you can earn at least as high a return on investment C, with less risk.

3. e. The foreign mutual funds. To be the marginal investor, you need to own a lot of stock and trade that stock. The founder/insiders and government own a lot of stock, but they do not trade. The domestic and foreign mutual funds own the same percentage, but the latter trade a lot more.

4. e. All of the above. The marginal benefit of diversification does decrease as you keep adding investments and there are both trading/monitoring costs associated with diversifying. It is also true that we stop with a list of what we think are the best investments in the market (even if is not true).

5. d. The CAPM does at least as good a job as the APM and multifactor models in forecasting future returns, and it is more intuitive and less work. The APM and multifactor models will do a much better job at explaining past returns, which should be no surprise since they are extracted from past returns. The CAPM does not do very well at forecasting expected returns, but used judiciously, it does at least as well as the other models and it requires only one input (a beta).

6. a. The rate on a 10-year US treasury bond. To get a risk free rate in US dollars, you cannot use a peso bond rate or the rate on a Mexican dollar bond (since it has default risk in it). You also need a long-term rate to get to a hurdle rate; hence the T.Bill rate will not work.

7. f. None of the above. You can start with a ten-year peso bond rate of 6%, but it has default risk. Since the local currency and foreign currency ratings are the same, you can estimate the default spread on the Mexican bond to be 1.5% by subtracting the US treasury bond rate of 2% from the Mexican government dollar bond rate of 3.5%. Subtracting this from the 6% peso rate gives you a riskfree rate of 4.5% in pesos.